



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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February 9, 1995

Mr. Eldred M. Garrick
Consultant
Western Clay Company
5465 Fair Oaks Drive
Salt Lake City, Utah 84117

Re: Plan Review, Western Clay Company (Western), Last Chance Bentonite Mine, M/015/061
(BLM UTU-69862), Emery County, Utah

Dear Mr. Garrick:

The Division has completed a review of your response letter received November 10, 1994. Please accept our apology for the unforeseen delay in responding to your letter in a more timely manner. A staff vacancy has contributed to an unfortunate backlog in our permitting activities. After reviewing the information, the Division has the following comments which will need to be addressed before tentative approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion.

R647-4-104 - Filing Requirements and Review Procedures

The Division understands the BLM San Rafael Resource Area have requested some additional information from Western before they can consider the Plan of Operations complete. Has Western responded to the BLM's concerns yet? Under the current MOU between the BLM and the Division we are required to coordinate our review process and bonding as much as possible. Please provide us with a copy of your response to their concerns. (AAG)

R647-4-105 - Maps, Drawings & Photographs

105.2 Surface facilities map

Please add a border to the "Mine Plan and Reclamation" map which shows the proposed outline of the pit area. This pit area border should be consistent with the borders shown on the other maps. (AAG)



R647-4-106 - Operation Plan

106.3 Estimated acreages disturbed, reclaimed, annually.

This submission did not contain a proposed mining schedule or a description of the areas to be disturbed or reclaimed annually. Therefore, the Division will assume Western proposes to post surety for the total disturbed area for the project.

Totaling all the figures in the table on page three of this submission gives approximately 10.5 acres. The 10.5 acre figure appears to include the 1.9 acre "No Vegetation" area twice because the No Vegetation area is included in the 6.1 acre figure for the pit area. The Mine Plan and Reclamation map lists the working area as 19.8 acres and the access road as 0.4 acres for a total disturbance of 20.2 acres. These figures imply there is an area of 9.7 acres which will be disturbed, but not reclaimed ($20.2 - 10.5 = 9.7$). Is this 9.7 acres, the "bentonite" area that will not be revegetated? Please explain.

The topsoil stockpiles and most of the waste storage areas are shown on the maps as satellite areas with no access roads or disturbed areas connecting them to the pit area. Please explain why disturbed areas for these connections were omitted. (AAG)

106.4 Nature of materials mined, waste and estimated tonnages

Page four of the submission estimates the volume of overburden material as 79,000 CY, the waste material as 49,500 CY, and the amount of material needed to totally backfill the excavations as 215,000 CY. This leaves a 86,500 CY deficit of backfill material which Western proposes to borrow from the ridge in the center of the pit. This is acceptable to the Division, provided the borrow area is included in the total disturbed acreage figure and also in the reclamation estimate. (AAG)

106.5 Existing soil types, location, amount

For reclamation surety purposes the Division will assume an average thickness of six inches of topsoil are available for salvage on the topsoil replacement area shown on the map. (AAG)

R647-4-109 - Impact Assessment

109.4 Slope stability, erosion control, air quality, safety

The letter attached to the submission from L. Carl Broadhead to the Utah Division of Air Quality indicates Western has contacted DAQ, but has not yet received an approved Air Quality Permit. Please provide this Division with a copy of the approved Air Quality Permit when it is available so we may include it with the plan. (AAG)

R647-4-110 - Reclamation Plan

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

From the information submitted by Western, the Division's interpretation of the reclamation plan is the following. All trash and other waste materials will be removed and disposed of in authorized land fills or disposal areas. Access roads will be contoured and revegetated. Culverts will be removed. The pit will be backfilled to be non-impounding using available overburden and waste material. Material will be borrowed from the ridge area in the center of the pit for use as additional pit backfill. Salvageable topsoil will be placed on the disturbed areas. Western estimates the available topsoil will cover approximately four acres. Soil material may be borrowed from the ridge to cover the remaining disturbed area. The depth of replaced topsoil material is estimated to be one foot. Western does not intend to attempt to revegetate the bentonite area which is void of vegetation and salvageable topsoil. All other disturbed areas will receive the revegetation treatments of disking, mulching, fertilizing and seeding. The BLM recommended seed mix, fertilizer, mulch and application rates will be used. Seeding will be done by drill seeder. Please confirm or correct this interpretation of the proposed reclamation plan. (AAG)

It is not clear what reclamation treatments, if any, Western proposes for that portion of the site with no vegetation or topsoil. At a minimum, the Division requests that this area be regraded to slopes of 3h:1v or less upon final reclamation. Please describe Western's reclamation plans for this area. (AAG)

It is not clear if there will be a highwall remaining at final reclamation. If a highwall does remain, the Division will require that it be no steeper than 45° and a safety berm/trench or fence be constructed to prevent the public from gaining access above the highwall (as required under R647-4-111.7 Reclamation Practices - Highwalls). If there is no access above the highwall, or if the highwall hazard is eliminated by backfilling no berms or other measures are required. (AAG)

R647-4-112 - Variance

Page seven of this submission indicates Western does not want to be responsible for attempting to revegetate the "bentonite" area. The "bentonite" area is indicated on two of the maps as an area of no topsoil or vegetation. This area runs along the western border of the pit. Western does not propose to place topsoil on this area or seed it. Western will need to submit a variance request in writing to the Division for this area. Variance requests must include the rule for which a variance is requested, the variance requested and a description of the area affected by the variance, justification for the variance, and alternate methods or measures to be utilized. Rule R647-4-111.12-Topsoil Distribution, deals with topsoil salvage/replacement, and rule R647-4-111.13-Revegetation, deals with revegetation treatments

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Eldred M. Garrick
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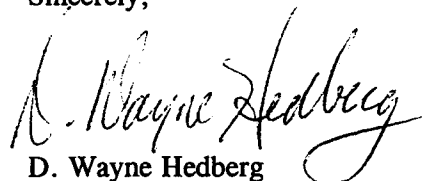
and revegetation success. Please provide this additional information if one or more variances are requested. (AAG)

R647-4-113 - Surety

The surety estimate prepared by Western has been modified by the Division. Modifications included using third party costs throughout the estimate, using a cost per CY for the pit backfilling and topsoiling, adding a mobilization cost, and using the current escalation factor for projecting surety amounts. The Division's estimate *assumed* a volume of topsoil was available to cover the reclaimed area (8.6 acres) with a one foot depth. An estimate of the volume of topsoil salvageable or available is needed to verify the topsoiling costs. Please explain the four acres of topsoiling included in Western's estimate (where/what is this area?). The cost of regrading the area which Western proposes not to revegetate may also need to be included depending upon the variances which are granted. A draft version of the modified surety estimate is attached. This estimate may need to be adjusted after Western provides the additional information. (AAG)

The Division will suspend further review of the Last Chance Bentonite mine NOI until your response to this letter is received. If you have any questions in this regard please contact me, Tony Gallegos, or Lynn Kunzler of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,



D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb

Attachments

cc: Stan Jackson, Western Clay Co.
Bryant Anderson, Emery County
Neil Simmons, BLM San Rafael, RA

M15-61.RVW

RECLAMATION ESTIMATE**DRAFT**

Western Clay Company

last revision

12/13/94

Last Chance Bentonite Mine

filename M15-61.WQ2

M/015/061

Emery County

Prepared by Utah State Division of Oil, Gas & Mining

*Details of Final Reclamation**-Reclamation consists of earthwork and revegetation; no structures are present**-Trash & debris to be removed to an authorized land fill or disposal area**-Pit backfilled with overburden & waste clay to be nonimpounding**-Topsoil replaced at approximately 1 ft depth on 6.7 acres* 10,809 CY est*-Amount of material needed for pit backfill (operators estimate)* 215,000 CY*-Borrow area for soil and backfill may be used**-Disturbed areas to be disced, mulched, fertilized, & seeded as requested by the BLM**-Disturbed acreage still unclear; DOGM estimates 8.6 acres total**-Permit boundary includes 20.2 acres, disturbed area estimated as 10.5 acres by operator**-Estimated total disturbed acreage =* 8.6

Activity	Amount	\$/unit	\$
Regrade no vegetation area	1.9 acre	365	694
Backfill pit to be nonimpounding	215,000 CY	0.23	49,450
Place topsoil material(6.7 acres)	10,809 CY	0.23	2,486
Regrade road & remove culvert	0.4 acre	365	146
Remove trash & debris	8.6 acre	100	860
	0	0	0
Mobilization	1 equip	1,000	1,000
	Subtotal		54,636
	Add 5% supervision		2,732
	Subtotal		57,367
	Add 10% contingency		5,737
	Subtotal in 1994 -\$		63,104
	Add 5 yr escalation at 2.01%		6,602
	Total 1999-\$		69,706

Rounded Total in 1999-\$**\$69,700**

Average cost per acre =

\$8,105

DRAFT